

NARCC Policy and Procedures Guidelines

**POLICY & PROCEDURES GUIDELINES
OF THE
NORTHERN AMATEUR RELAY COUNCIL OF
CALIFORNIA**

NARCC Policy and Procedures Guidelines

Table of Contents

I.	INTRODUCTION	3
II.	DEFINITIONS.....	3
III.	FREQUENCY COORDINATORS.....	4
IV.	COORDINATION SERVICE.....	4
V.	COORDINATION CONDITIONS	6
VI.	PROCEDURE FOR OBTAINING A COORDINATION.....	6
VII.	PUBLISHING THE PROPOSED COORDINATION	7
VIII.	COORDINATION MAINTENANCE	7
IX.	TERMINATION OF COORDINATION.....	8
X.	ORGANIZATION NAME OR ORGANIZATION REPRESENTATIVE CHANGE....	9
XI.	FREQUENCY SEARCHES.....	9
XII.	REPEATER TECHNICAL STANDARDS	9
XIII.	CTCSS OR DIGITAL SQUELCH.....	10
XIV.	RESOLUTION OF DISPUTES	10
XV.	SPECTRUM MANAGEMENT COMMITTEE	11
XVI.	TECHNICAL COMMITTEE.....	12
XVII.	FREQUENCY COORDINATION COMMITTEE CHAIRMAN.....	12
XVIII.	AGREEMENT OF NONDISCLOSURE.....	12
XIX.	CONCLUSION	13

NARCC Policy and Procedures Guidelines

POLICY & PROCEDURES GUIDELINES OF THE NORTHERN AMATEUR RELAY COUNCIL OF CALIFORNIA

I. INTRODUCTION

1. NARCC is the entity, recognized in Northern California by amateur operators whose stations are eligible to be auxiliary or repeater stations, that recommends transmit/receive channels and associated operating and technical parameters for such stations in order to avoid or minimize potential interference.
2. The FCC puts the burden of correcting interference on the uncoordinated station.
3. In addition, NARCC provides band planning as described herein. NARCC represents its members' interest while formulating regional band plans, working cooperatively with other amateurs representing different operating modes.
4. NARCC is a certified member of the National Frequency Coordinating Council (NFCC).
5. NARCC provides repeater directory data for its service territory to the ARRL for inclusion in their repeater directory.
6. Frequency coordination service is performed at no charge. NARCC is financially supported by members who pay annual dues.

II. DEFINITIONS

1. Board: Elected members of NARCC who serve, without compensation, as Directors of the organization.
2. Coordinator: A person appointed by the Board to coordinate frequency use.
3. Coordination: A determination by NARCC that a repeater or auxiliary station on a specific transmit/receive channel with associated operating and technical parameters does not substantially interfere with co-channel and adjacent-channel repeater operations. A Coordination does not assure any right to exclusive use of a frequency, or assure that the Coordination Holder has any specific rights other than those guaranteed by FCC Part 97.
4. Harmful Interference: The reception of a signal with enough strength that it captures the receiver or system away from the desired signal.
5. Nuisance Interference: The reception of a signal with enough strength that it is heard in the undesired receiver, or that it degrades the existing system to some degree less than would seriously impair the operation of the existing repeater within the confines of their primary coverage area.
6. Organization: The name of the group to which the Coordination is granted. It may be an individual, club, corporation, sole proprietor, partnership or other entity that owns or

NARCC Policy and Procedures Guidelines

operates one or more repeaters. The organization does not have to have an amateur license but must be represented by a licensed amateur.

7. **Organization Representative (Org Rep):** A person licensed in the amateur radio service who is the liaison between the organization and NARCC. The Org Rep has the responsibility to support the interests of the organization in all activities and communications with NARCC.
8. **Service Territory:**
 - a. North: California - Oregon border
 - b. East: The Nevada state line and southward along the summit of the Sierra Nevada range to the Tehachapi pass.
 - c. Southwest to the ridge line of the Sierra Madre range near Frazier Park
 - d. Westward along the ridge line to the Pacific Ocean at a point between Santa Maria and San Luis Obispo near Pismo Beach.
 - e. West to the Pacific Ocean to the radio horizon.

Applicants close to a border should contact both NARCC and the adjacent coordinating council for joint Coordination.

III. FREQUENCY COORDINATORS

1. Coordinators are appointed by the Board, serve at the pleasure of the Board and report to the Chairman of the Frequency Coordination Committee.
2. Frequency Coordinators are responsible for processing applications for Coordination and management of their band in accordance with the rules outlined in this document.
3. The Frequency Coordinator makes the final decision if a station can be granted the status of "coordinated". The Coordinator can call upon the Board to help resolve problems as needed.
4. No Coordinator or Board member may act upon any Coordination that he/she has any direct interest in while serving as a Coordinator or a Board member. Such conflicts of interest shall be referred to the Chairman of the Frequency Coordinating Committee for referral to another Coordinator who has no interest in the pending action.
5. Approved Applications not requiring publication will be marked as "coordinated" in the online database. The online repeater listings will show the change the following day.

IV. COORDINATION SERVICE

1. NARCC will provide Coordination service for the following types of amateur radio stations:

NARCC Policy and Procedures Guidelines

- a. Repeater stations (all modes)
 - b. Auxiliary stations (all modes)
2. NARCC Coordination service will consider the following criteria:
- a. The best use of the amateur radio frequency spectrum, taking into account the public interest, convenience and necessity and the best interests of the amateur radio community.
 - b. Number of users
 - c. Number of coordinated stations
 - d. RACES, ARES, or other affiliation
 - e. Existing coverage in the area requested
 - f. Individual or club Applicant
 - g. Power and location
 - h. Local or regional coverage.

Although a waiting list may be maintained by NARCC for new Coordination Applications, Coordination may not be allocated strictly on a "first come, first serve" basis, but with consideration of the Coordination criteria listed above.

3. Band plans for 29 MHz and above have been established for the region. Applications for Coordination must follow the band plan.
4. A Coordination is for a station as described herein and is assigned to the organization whose name is designated in the Application for Coordination. A Coordination expires after three (3) years from approval. It is the responsibility of the Org Rep to keep all information current.
5. Coordination of a repeater or auxiliary station is for a specific mode of operation as well as the elements listed below.
- a. Location
 - b. Primary coverage area
 - c. Frequency(s)
 - d. Duplexer output power
 - e. Feedline type and length
 - f. Antenna radiation pattern and gain

NARCC Policy and Procedures Guidelines

- g. Tower elevation (AMSL) at ground level
 - h. Height of antenna on tower
 - i. CTCSS or digital squelch
 - j. Use of voting or additional receivers
6. Repeater frequency Coordination will take into consideration the impact of transmissions of fixed and mobile stations or other users on the input frequency. Use of a given repeater by users outside its primary coverage area is discouraged. The potential for interference will be minimized through the use of required CTCSS or digital squelch.

V. COORDINATION CONDITIONS

1. Existing coordinated repeaters must be protected to the fullest extent consistent with good system design.
2. Some degree of nuisance interference may occur and must be tolerated by operators of coordinated stations and their users.
3. It is the responsibility of the Coordination Applicant to avoid interference. This requirement may be waived by written consent from affected stations.
4. Existing Coordination holders are expected to cooperate in conducting tests regarding a claim of interference. All parties should be prepared to substantiate that their station configuration conforms to their documentation.
5. Field tests may be required. It is the responsibility of the Applicant to arrange for such tests to the satisfaction of the Coordinator.

VI. PROCEDURE FOR OBTAINING A COORDINATION

1. The station described in the Application must be on the air and periodically identifying using an automatic voice or CW ID'er announcing the repeater's callsign.
2. The Application should be filed at www.narcc.org. Paper Applications are not recommended but will be processed. Paper Applications may be mailed to NARCC'S U.S. Postal Service address.
3. The decision to grant or deny Coordination is made by the Frequency Coordinator.
4. Disputes regarding the issuance of a Coordination may be reviewed by the Board as provided in the Dispute Resolution Process. The decision of the Board is final.
5. The Coordination will be granted to the Applicant after:
 - a. A NARCC Frequency Coordinator has reviewed the proposed operation as described in the Application and has found that such operation will meet the

NARCC Policy and Procedures Guidelines

conditions described herein, and

- b. The membership of NARCC has been notified as provided in these rules of the intention to issue a Coordination to the Applicant and that either no challenge has been received or that any such challenge has been resolved.

VII. PUBLISHING THE PROPOSED COORDINATION

Applications for a new Coordination or modification to an existing coordinated station that the Coordinator has marked "Pending," will be publicized as described below. The purpose of publicizing a Coordination in pending status is to provide an opportunity for station owners and operators to object if the proposed operation will cause interference with their operation.

1. Publication is required for the following:
 - a. New station Coordination
 - b. Update of a previously coordinated station for:
 - i. Site change
 - ii. Frequency change
 - iii. Any change that causes a change to the coverage area
2. Notice of the proposed Coordination will be published on the NARCC website. In addition, an email notification will be sent to Org Reps that have requested such notice. Any objections to the granting of the Coordination must be in writing and received by NARCC within 60 days of the publication date.
3. If no objections to the Coordination are received, the Coordinator may set the station's status to "Coordinated". NARCC reserves the right to withhold coordinated status if further material information becomes available subsequent to publication. After approval of the Coordination, a Certificate of Coordination shall be made available either by providing a downloadable online Certificate or by mailing a printed certificate to the applicant.
4. If the Application for Coordination is rejected for any reason, a written notice of such rejection shall be sent to the Applicant stating in reasonable detail the justification for such rejection. This notice shall advise the Applicant of the right to appeal the decision.

VIII. COORDINATION MAINTENANCE

1. To keep a Coordination current, an organization must submit an updated Application (with or without changes) in the six month period prior to the Coordination's expiration.
 - a. If no changes are necessary and the coordination is within six months of expiring, use the *Quick Update* option to automatically renew the coordination for the next

NARCC Policy and Procedures Guidelines

period. An email will be sent to the Org Rep confirming the update.

- b. If there are no changes but the coordination has been expired for less than six months, use the *Update With Changes* option not making any changes but add in Notes To Coordinator that you are renewing the coordination explaining the station parameters have not changed. The coordinator will validate there are no changes on the application and renew the coordination for the next period. Note: if the coordination has been expired for more than six months, the coordinator will perform a complete coordination examination of the station.
 - c. The coordinator will promptly notify the organization representative of any change deemed to be material found in the application. This communication will be via email and must be responded to within thirty days. If no response is received by the end of that period a second notification will be sent. If no response is received by the end of the second thirty day period, the application is moved to the archive file with appropriate notation as to why. In the event the applicant does not have an email account, a first class letter will be sent.
2. If, for any reason, a coordinated station is continuously inoperative for more than 30 days the Org Rep must notify NARCC in writing or the Coordination is suspended. For good cause, the Board may permit the Coordination to remain in effect for a reasonable period even though the station is off the air.
 3. In the event there is any change in the parameters for the repeater (as set forth in Section IV (5)) the Coordination is suspended. However, the Coordination may be reinstated at any time within six months by compliance to the parameters of the Coordination. The Board may, in its discretion, extend the period for a reasonable time.

IX. TERMINATION OF COORDINATION

A coordination may be terminated for the following reasons:

1. Failure or refusal to correct changes made to the coordinated station causing it to not be in compliance with the conditions for which coordination was granted. If correction is not made within 60 days of notice, or such other time as may be granted by the Board or Frequency Coordinator, the coordination is terminated immediately.
2. Failure to timely file update forms in the absence of an extension of time granted by the Board or Frequency Coordinators

The organization representative shall be given notice of the proposed termination. The notice shall state the grounds for proposed termination, the proposed effective date of termination, and shall grant a reasonable time to correct any violation or deficiency. Disputes regarding termination of coordination shall be resolved in accordance with the dispute resolution procedures.

Notice of termination described in #1 and #2 above will be via first class mail addressed

NARCC Policy and Procedures Guidelines

to the organization representative for the organization holding the coordination at the most recent address in NARCC's records. It is the responsibility of the organization representative to maintain accurate contact information in their online and editable organization record.

3. Routine notification of coordinations approaching the end of their granted period are sent to the organization representative by email stating a station's coordination will expire in sixty days with instructions for renewal. A second email notification is sent the day after a coordination has expired. See section VIII for renewal instructions.

X. ORGANIZATION NAME OR ORGANIZATION REPRESENTATIVE CHANGE

1. The Org Rep may request a change of Org Name, but, since the Coordination is granted to the organization, NARCC may require confirmation from a person with authority within the organization.
2. The Org Rep may be changed online by the current Rep. However, if a request is made by another person or by some other means of communication, NARCC may require verification that the person requesting the change has authority to do so.

XI. FREQUENCY SEARCHES

1. If NARCC determines that a repeater is off the air for more than 30 days then, unless the organization has met the conditions permitting a temporary off air status as provided in Section VIII, NARCC shall notify the Org Rep by first class mail to his last known address and also sent to his last known email address that his Coordination will be revoked 30 days after the mailing and emailing of the notice unless he objects in writing by letter postmarked within such 30 day period. If the Org Rep so objects within the 30 day period the Board shall set a date for a review at which time the Rep may present facts showing that the repeater was, in fact, on air.
2. If NARCC determines that a previously on air uncoordinated repeater is off the air for more than 30 days then NARCC may issue a Coordination for the frequency used by such repeater, provided NARCC gives notice by first class mail to the last known address of the operator of the repeater and also to his last known email address that the frequency will be reassigned unless he objects in writing by letter postmarked within such 30 day period. If the repeater operator so objects within the 30 day period the Board shall set a date for a review at which time the operator may present facts showing that the repeater was, in fact, on air.
3. The notices required in paragraphs (1) and (2) shall be sent by the communications manager or by any other officer or Board member designated by the president.

XII. REPEATER TECHNICAL STANDARDS

Due to the congestion on the VHF bands and the implementation of splinter channels with 15 kHz splits, all systems coordinated will be required to adhere to technical standards.

NARCC Policy and Procedures Guidelines

NARCC may from time to time revise these standards to conform to evolving technology.

1. Receiver RF and IF stages should be designed and adjusted to narrow band characteristics with sufficient selectivity to avoid interference from adjacent channels. Transmitter deviation peaks should be symmetrical and should not exceed peaks in excess of 4.0 kHz. In the case of digital systems, they should be designed to remain within channel limits with minimum spill over, and in no event should the transmitter deviation exceed the accepted bandwidth for the mode in use. This will include digital systems as well as analog systems.
2. Systems should be configured to be a 1 to 1 system. This is defined as one transmitter with coverage sufficient to cover only the area of primary receiver coverage. (System should not transmit further than it can receive.)
3. All stations will have the proper filters, duplexer, isolator, feed lines and antennas to insure proper operation and to minimize the generation of inter modulation products, harmonics, white noise, spurs and spikes to other systems. It is a condition of Coordination that the repeater operator will adhere to the "standards of good engineering practices".

XIII. CTCSS OR DIGITAL SQUELCH

1. Coded squelch is a method to reduce "nuisance interference." It consists of two basic types, tone and digital, with tone being the most commonly used. This is known by several manufacturers' brand names: Private Line™/PL, Channel Guard™, etc. It is often abbreviated as CTCSS - continuous tone coded squelch system. In either instance, a repeater so equipped will not hear the transmissions of another station or mobile unless they have an identical tone or code. While this offers no protection from on channel signals that are as strong as or stronger than the desired signal, it prevents unwanted weaker signals from being heard and causing nuisance interference. NARCC specifies that:
 - a. The use of CTCSS or digital coded squelch on all voice systems is mandatory. Failure to do so will subject the Coordination to suspension or revocation. See section III.
 - b. It is acceptable to disable tone squelch for emergency use and nets and/or drills as long as it is re-enabled after not more than ten (10) minutes of the conclusion of the event.

XIV. RESOLUTION OF DISPUTES

In the event that parties to a Coordination dispute are not able to resolve their differences among themselves, said dispute may be presented to the Board for resolution as follows:

1. Any party to the dispute may submit a Request for Dispute Resolution in writing to the Board of Directors and to each party to the dispute setting forth the facts and the reasons

NARCC Policy and Procedures Guidelines

for the dispute.

2. The board shall, after conferring with the parties, set a date for the hearing and give all parties to a dispute at least thirty days notice in writing of the time and place.
3. The responding party or parties to the dispute may submit a responsive brief to the Board. Unless otherwise directed by the Board the brief shall be sent to the Board and all other parties at least ten days prior to the hearing.
4. Once the dispute process is commenced the parties are not to discuss any material issues of the dispute with individual Board members. Inquiries on procedural matters relating to the dispute process should be directed to the president or his delegated representative.
5. The dispute hearing shall take place in front of a quorum of the full Board of Directors.
6. The board will rely on the parties to present the facts. However, the Coordinators and the technical committee shall cooperate with the parties in making information available for presentation at the hearing.
7. A Board member shall disclose any bias, relationship to any of the parties or discussions relating to the matter he has had with any of the parties after the filing of the dispute and excuse himself from participating in the proceedings if such facts would prevent him from being fair and impartial. This would not prevent him from testifying at the request of any party at the hearing. Any of the parties or members of the Board may raise the issue of ability of a Board member to be fair and impartial.
8. All written documentation that is to be presented at the hearing must be exchanged between the parties ten days prior to the hearing date unless the board upon terms fair to the other party otherwise directs.
9. Each party shall be allowed a reasonable time to present the issues and for rebuttal and closing. The presentation may consist of written documentation and oral testimony by the parties and witnesses.
10. At the request of any party or on its own motion the board may continue the hearing to permit the presentation of further evidence or for filing of briefs by the parties.

After presentation by the parties the Board shall make its decision within a reasonable period of time. The deliberations shall be at a meeting open to the public. The decision and the reasons for the decision together with the vote of each member shall be set forth in writing and entered in the minutes of the meeting. Copies of the decision shall be sent to each party.

XV. SPECTRUM MANAGEMENT COMMITTEE

1. The Spectrum Management Committee is a standing committee in NARCC. The committee is made up of representatives from all modes of communications used on frequencies above 29 MHz in the NARCC area. The chairman of the committee is

NARCC Policy and Procedures Guidelines

appointed by the president and requires approval of the Board.

2. The Spectrum Management Committee has the task of ensuring that there is sufficient spectrum set aside for utilization by all mode users. Examples of use are FM repeaters, weak signal, satellite communications, digital relay, packet, FM, AM, ATV, moon bounce and any other mode of communication that may be used in the furtherance of the amateur radio hobby.
3. The committee will examine each band and make recommendations on frequency usage and allocations to ensure that adequate spectrum is allocated with a minimum amount of interference to other users. They will also examine existing band plans and make recommendations as to channel utilization, offset splits, repeater segments, auxiliary frequencies and other parameters within the scope of repeater segments and FCC Part 97 rules in effect addressing frequencies above 29 MHz. Any recommendations will be presented to the Board for further investigation, review and or approval.
4. The committee shall review each band no less than once in any three (3) year period to ensure that no changes are necessary due to changes in use and/or new technologies.

XVI. TECHNICAL COMMITTEE

1. The Technical Committee will be made up of qualified amateurs with technical or spectrum background who can contribute to the overall strength of the committee. Committee members are appointed by the president and require the approval of the Board and serve at the pleasure of the Board. Members of the Board may be appointed to the committee.
2. The Technical Committee shall assist the Coordinators and the Board as needed in Coordination disputes and research on technical matters.

XVII. FREQUENCY COORDINATION COMMITTEE CHAIRMAN

1. The chairman of the Frequency Coordination Committee is appointed by the president and requires the approval of the Board and reports to the Board. He is responsible for the management of the Frequency Coordinators and the Coordination Applications pending in the online database.

XVIII. AGREEMENT OF NONDISCLOSURE

1. All Board members, Coordinators, officers, data base managers or other persons involved with the operations of the NARCC organization will have on file with the secretary of the corporation a statement of non disclosure. This statement, which is binding, will state that any Coordination information, software development, programs and corporation frequency database contents, except for the basic information for the ARRL directory and web page directory is of a confidential nature, is the sole property of NARCC, and will be surrendered to NARCC upon their leaving office. The persons listed above shall make no claim of ownership to any data acquired during their term of office and acknowledges

NARCC Policy and Procedures Guidelines

by virtue of accepting the position of responsibility, that all data and information gathered for purposes of granting and/or maintaining Coordination records shall be the sole copyright property of NARCC as a corporation and in all other respects the sole property of NARCC.

2. All NARCC Coordination records are considered to be copyrighted by NARCC pursuant to laws pertaining to same and may only have limited publication such as frequency directory use with or without fees as determined by the Board.

XIX. CONCLUSION

The Policy and Procedures as adopted by the Board are guidelines for the Coordination process and do not create any rights to a Coordination.

END